# UTAH DEPARTMENT OF TRANSPORTATION TRAFFIC OPERATIONS CENTER

### MONTHLY REPORT SEPTEMBER 2003

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#### **Field Devices Summary** Freeway Closed Circuit Television (CCTV) 163 Surface Street CCTV 32 Dial-up CCTV 35 **Total CCTV 230** Freeway VMS 42 Surface Street VMS 17 Portable VMS **Total VMS 62** HAR (6 deployed, 5 portable units) 11 231 **TMS RWIS** 41 Connected Traffic Signals 623 Connected Ramp Meters 23

## **Operations Summary**

VMS Messages Displayed	476
Signal Timing Calls	41
Signal Maintenance Calls	248
New Work Orders	389
Incident Responses	498
Website Visitor Sessions	66,719
511 Calls	12,977
Email Alerts Sent	464
CommuterLink Questions	12

## **TOC Employee of the Month**



**Keith Scholl – TOC Computer Technician** 



Senator Killpack Tour – Davis County District

Left To Right: Carlos Braceras, Senator Sheldon Killpack and John Njord

## **KUDOS!**

The UDOT Construction Crew led by Lee Simmons presented TOC Operator Karen Wilding with recognition for her assistance during their recent freeway construction project. Karen helped to quickly advise motorists of frequently changing lane restrictions and closures during their evening and weekend construction activities.

#### **TOC Mission**

- 1. To Support UDOT and the Department of Public Safety in Improving Highway Safety.
- 2. To Help Provide Reliable and Efficient Travel.
- 3. To Provide Useful and Timely Real-time Traffic Information.
- 4. To Work Together with Other Government Agencies to Serve the Public.
- To Provide Excellent Customer Service.

# ACTIVITY HIGHLIGHTS

# **TOC Activities**

#### This Month

- 1. The Traffic Operations Center has been very busy this month helping to guide travelers through multiple construction projects. The traveler information complexities presented by these projects required detailed planning, coordination and many night and weekend overtime hours to help keep the public as informed as possible.
- 2. The Traffic Signal Systems team, led by Mark Parry and Mark Taylor, has completed their semi-annual reviews of the signals within Regions 1 and 4. The results of this review help us to gauge the condition of the systems in order to set appropriate work priorities and measure how well the systems are holding up under constantly increasing demands.
- 3. Troy Hyer from the TOC Control Room Staff met with Utah State Senator Sheldon Killpack, Carlos Braceras, John Njord, and Linda Toy Hull for a tour of the Traffic Operation Center facility. Senator Killpack is one of four senators that represent Davis County.
- 4. Mr. J.D. Kesler, Aide to United States Congressman Jim Matheson, was given a tour of the TOC by Dave Kinnecom. Mr. Kesler serves as the Policy Advisor for Congressman Matheson. Linda Toy Hull, Director of Legislative and Governmental Affairs accompanied Mr. Kesler during this tour.
- 5. The American Public
  Transportation
  Association (APTA) held
  its annual meeting in Salt
  Lake City from
  September 28<sup>th</sup> to
  October 2<sup>nd</sup>. While here
  they toured the TOC and
  saw the role that it plays
  in traffic management,
  especially with UTA's
  bus and light rail
  systems.



6. Two new TOC Operators have been hired to fill openings in the Operations Staff. Samantha Belliston will work as the afternoon Information Specialist contacting the media and performing quality assurance of information leaving the control room. Amanda Ritzert will be a great asset to the TOC Operations Staff as one of the afternoon operators. Please join us in welcoming them to the TOC.

# **ATMS Improvement and Expansion Activities**

The following is a list of many of the projects that have either been completed, or are currently underway:

#### Region 1:

- Conduit and fiber installation to 27 intersections in Layton and Roy have been completed. In addition to these 27 intersections, this project includes conduit to two CCTV's for future fiber drops. Americom Technology has spliced as well as tested the fiber. All communication and electronic equipment for this project has been ordered and plans are being made to receive this equipment next month.
- RWIS pavement sensors and tower base have been completed at the Tremonton site as well as the Plymouth RWIS sites.

#### Region 2:

 Construction on the Wendover and Perry Ports of Entry Remote Control Flashing sign Project continues.



**Region 3 VMS Pole Foundation** 

- Signposts have been installed at this site after which the solar panel foundations were poured on the Perry side of the Port of Entry.
- Work continues on the Region 2 Inter-connect. Currently the Intersection at 1700 South and Pioneer road has been completed. Fiber plans have been designed which will provide communication to another 11 traffic signals in the Region.
- Three TMS Sites will be relocated on State Route 201. These sites are being relocated due to the construction of a new frontage road on the north side of State Route 201 from 5600 West to 7200 West.

#### Region 3:

- Final communications for the Center-to-Center connection is currently being tested from the TOC to the Region 3 Complex. This integration provides the TOC access to all TMS, CCTV and soon to be installed VMS located in Region 3, and allows users of the workstation at the Region 3 Complex full functionality to the TOC's ATMS devices.
- A draft of a Concept Report has been completed for Utah County to integrate some of the major stakeholders, namely Provo, Orem and UTA, with CommuterLink. This report is in the process of being distributed to the various stakeholders for comment and review.

#### Region 4:

• The construction of the Starvation Bridge RWIS site is currently underway. This RWIS is being constructed in conjunction with the resurfacing project of the Starvation Reservoir Bridge. In the month of September pavement sensors were installed in the roadway.

#### Acronyms

ATMS Advanced Traffic Management System TMS Traffic Monitoring Station (count station)

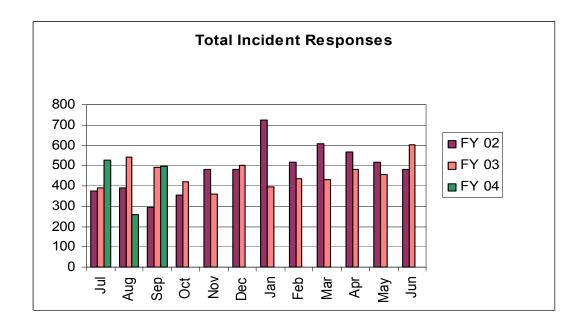
CCTV Closed Circuit Television TOC Traffic Operations Center

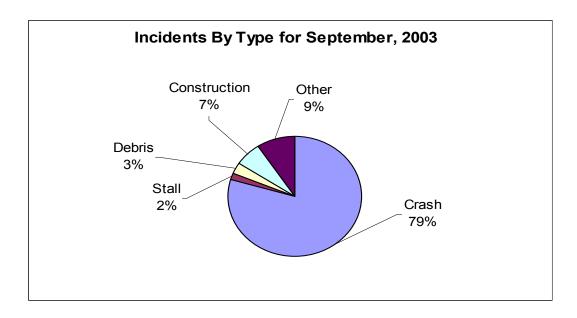
DPS Department of Public Safety
HAR Highway Advisory Radio
TTI Travel Time Index
VMS Variable Message Sign

**RWIS** Road-Weather Information System

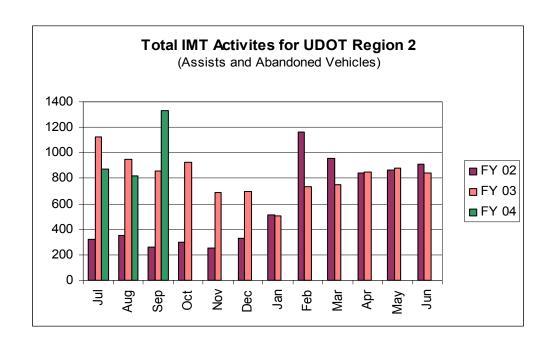
# **Safety**

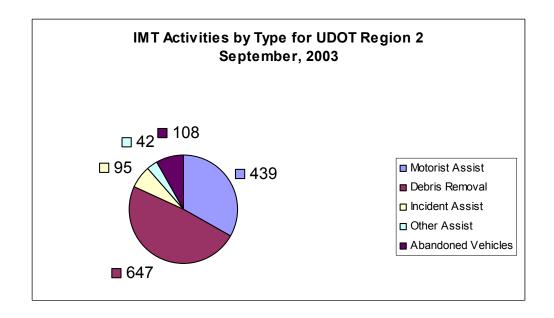
An incident response is an incident recorded in the ATMS system. These can be of several types, including crash, construction, debris, stall, congestion, or other. Each time an incident is created information is sent to the 511 system, the website, and generated email alerts.





# Region 2 Incident Management Team (IMT) Activities





# **Freeway Traffic Level of Service**

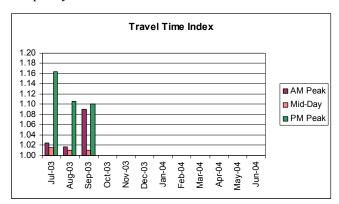
Freeway flow measures are taken from the Traffic Monitoring Stations (TMS) located throughout the Salt Lake Valley. As more TMS sites are installed throughout the state, they will be included in these performance measures.

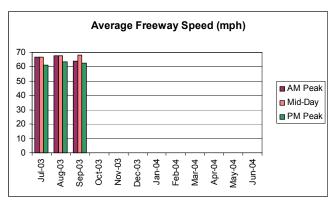
*Travel Time Index*: This measure of mobility is based on freeway speeds and is weighted by segment lengths and by the traffic volume. A value of one (1) represents free-flow speeds. A value of 1.12 indicates that the average vehicle trip takes 12% longer than if that were the only vehicle on the freeway.

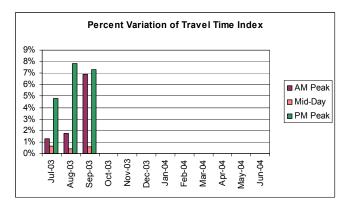
Percent Variation of Travel Time Index: The percent variation in the Travel Time Index is a measure of how much the Travel Time index changes from day-to-day.

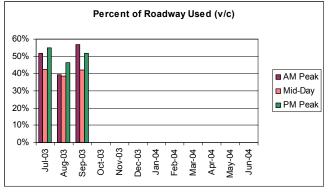
Average Freeway Speed: The Freeway Speed is weighted by volume.

*Percent of Roadway Used*: The percent of roadway used is the ratio of the volume on the segment to its capacity. This is otherwise known as the volume to capacity ratio, or (v/c).









The 5 links with the highest average Travel Time Index for the month are\*:

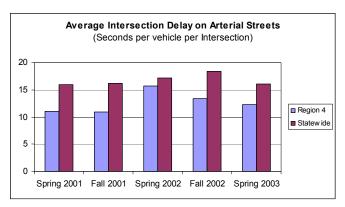
Segment	Period	Avg Of TTI
I-15 NB from Point-of-the-Mountain to 10600 S	AM Peak	1.66
I-15 NB from 600 N to I-215 W	PM Peak	1.43
SR-201 WB from I-15 to I-215 W	PM Peak	1.26
I-15 NB from 600 S to 600 N	PM Peak	1.24
I-215 S WB from Knudsen's Corner to I-15	AM Peak	1.24

<sup>\*</sup> I-215 S WB from Knudsen's Corner to I-15 shows a high TTI because of construction in the area.

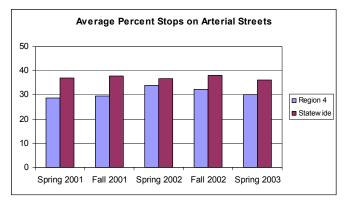
## **Surface Street Traffic Level of Service**

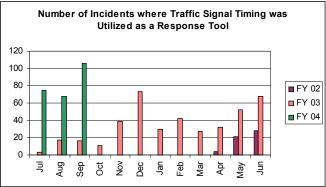
The surface street traffic statistics are generated through a series of Travel Time measurements. Much can be learned through several runs along a corridor, including the average travel time, the average percent of intersections at which a vehicle must stop, the average time stopped at an intersection, and the average speed. The Statewide Timing group gathers these measurements from Regions 1 through 4 twice each year. The chart in the lower right corner shows the number of incidents where traffic signal timing was modified in order to help traffic flow around closed lanes, or to help relieve excessive congestion.

Since the data is gathered semi-annually, each month this report will provide charts for a region compared to the statewide average. The charts below represent Region 4 compared to the Statewide Average.

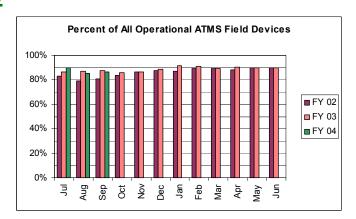


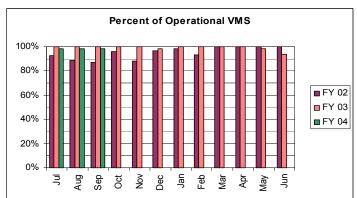


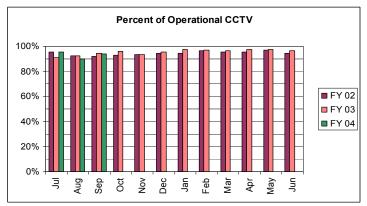


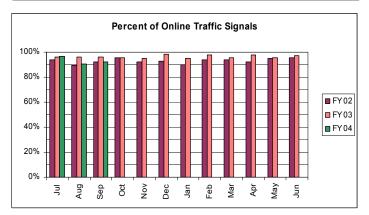


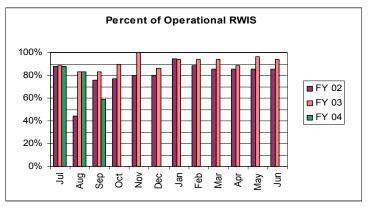
# **Maintenance**

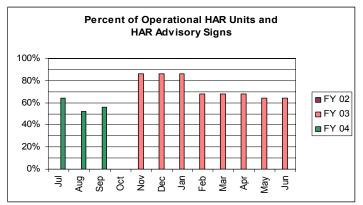


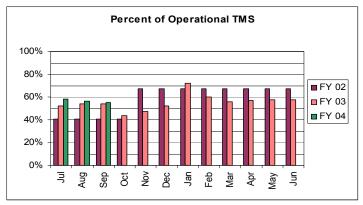




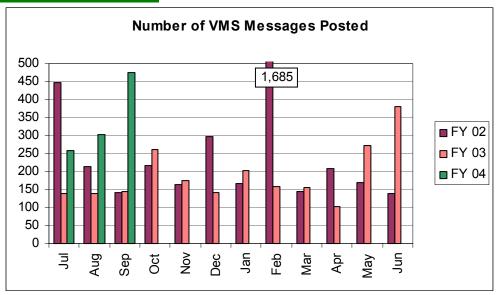


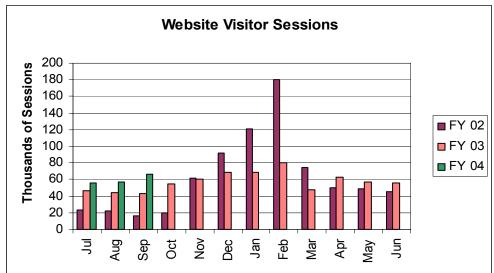


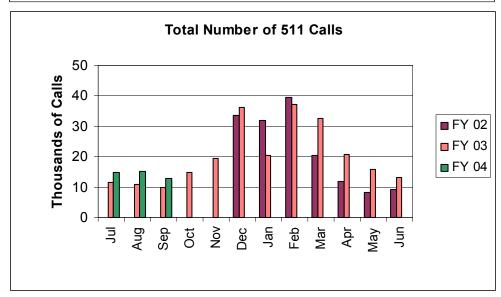




# **Traveler Information**







# **Customer Service**

